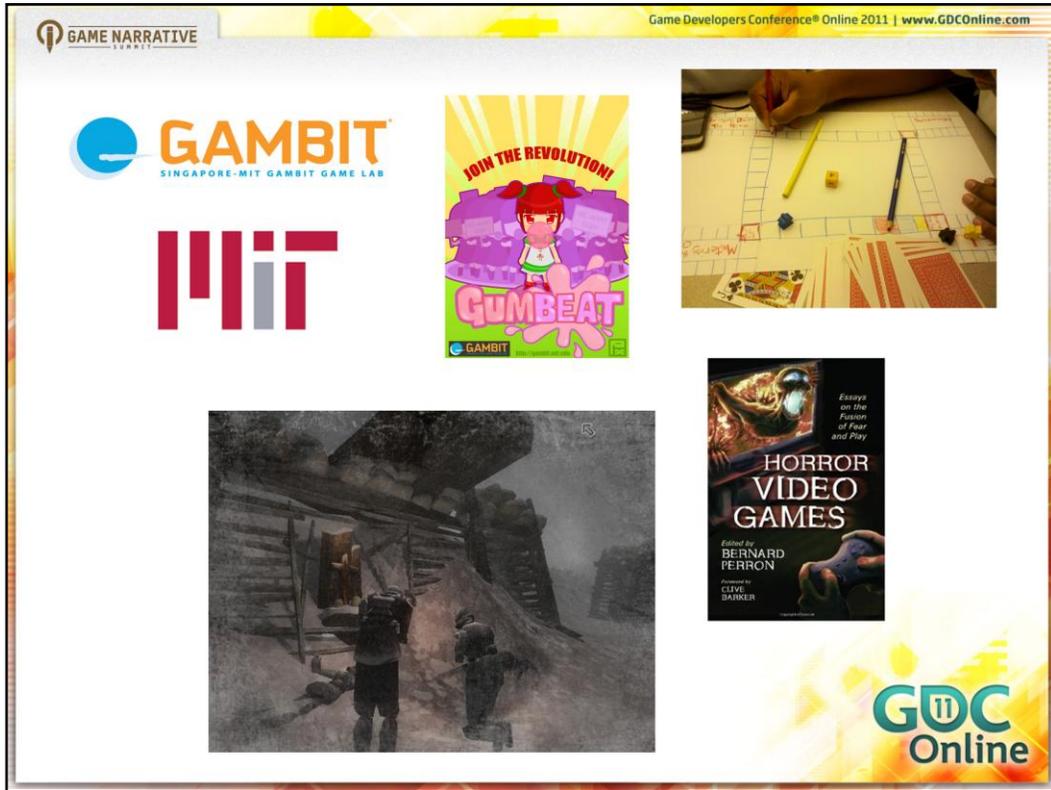




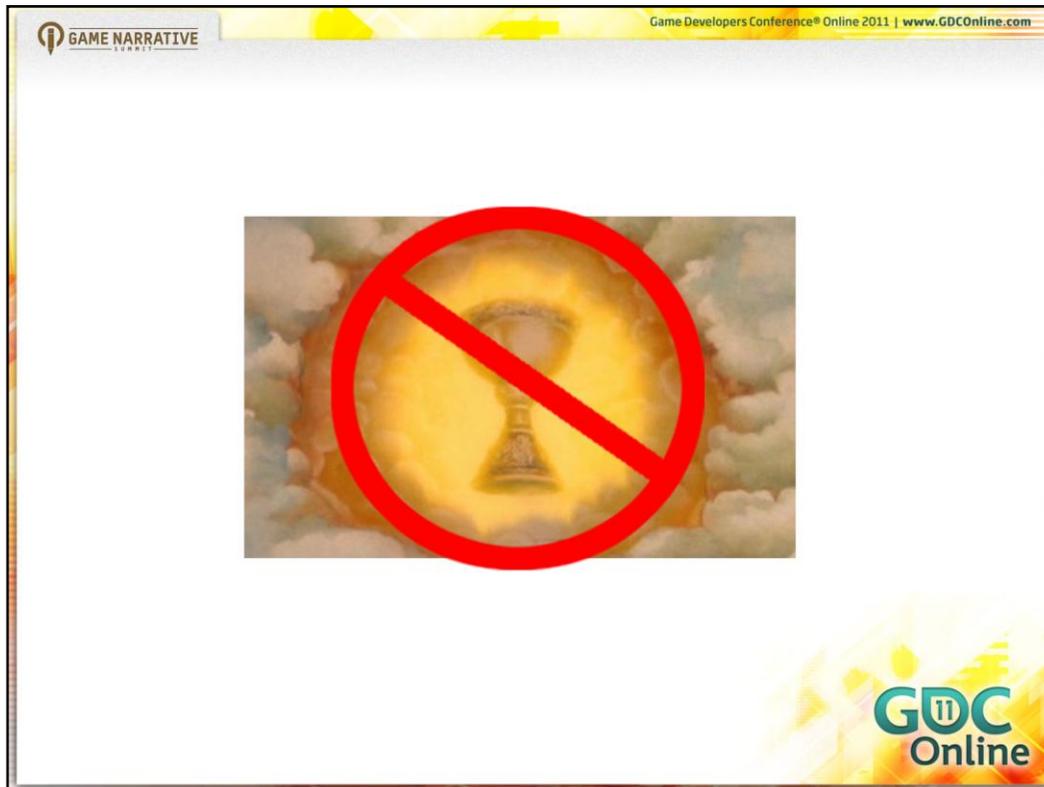
The Future Is Now
Emergent Narrative without Ridiculous Tech
Matthew Weise
Game Design Director, Singapore-MIT GAMBIT Lab

Game Developers Conference® Online 2011
October 10-13, 2011 | Austin, TX
www.GDCOnline.com





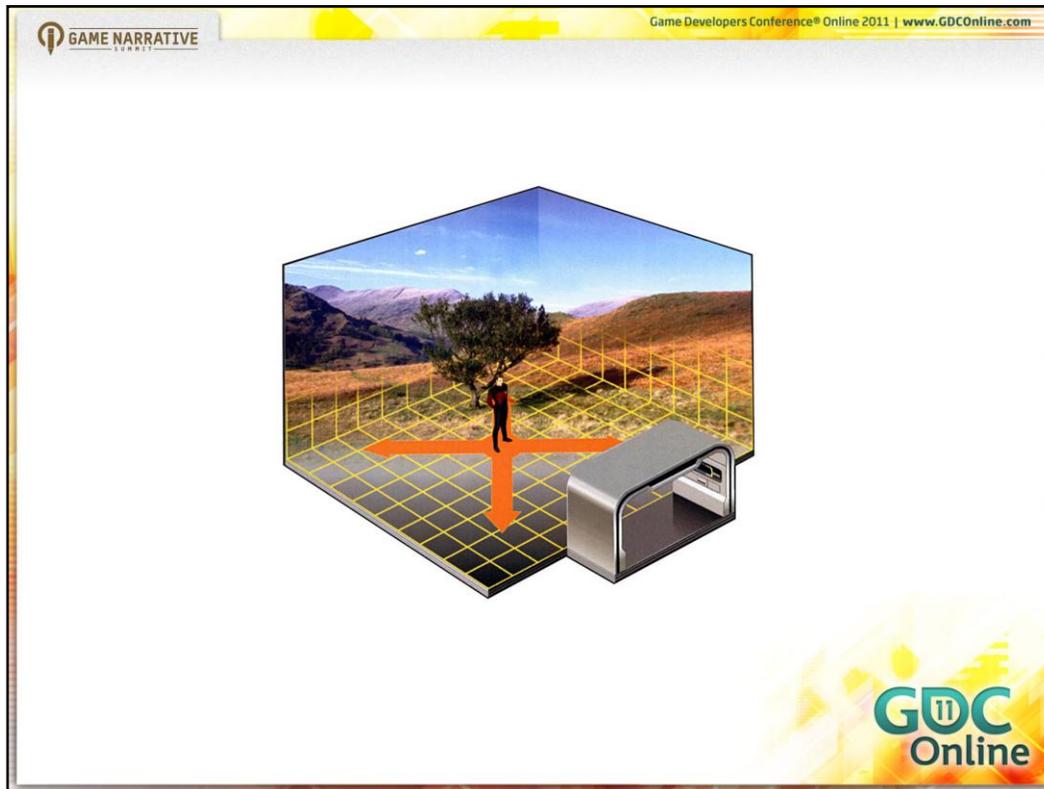
Game designer in residence at MIT.



Anti-holy grail talk

Against the idea that someday a technological breakthrough will create “true” interactive narrative (or emergent, dynamic, whatever)

And that will free us from the both static linear narratives (FF) and the content generation nightmare of current non-linear narratives (ME)



The Utopian Ideal

Dreams aren't bad, but in this case it has had a limited rather than expanding effect on our imaginations

Drama Management



What I'm going to call "drama management" (academic term, could also call it virtual GM)

A.I.-guided story construction (rising action, falling action, climax, beginning/middle/end, etc.)

Simulating a storyteller is a big complexity problem



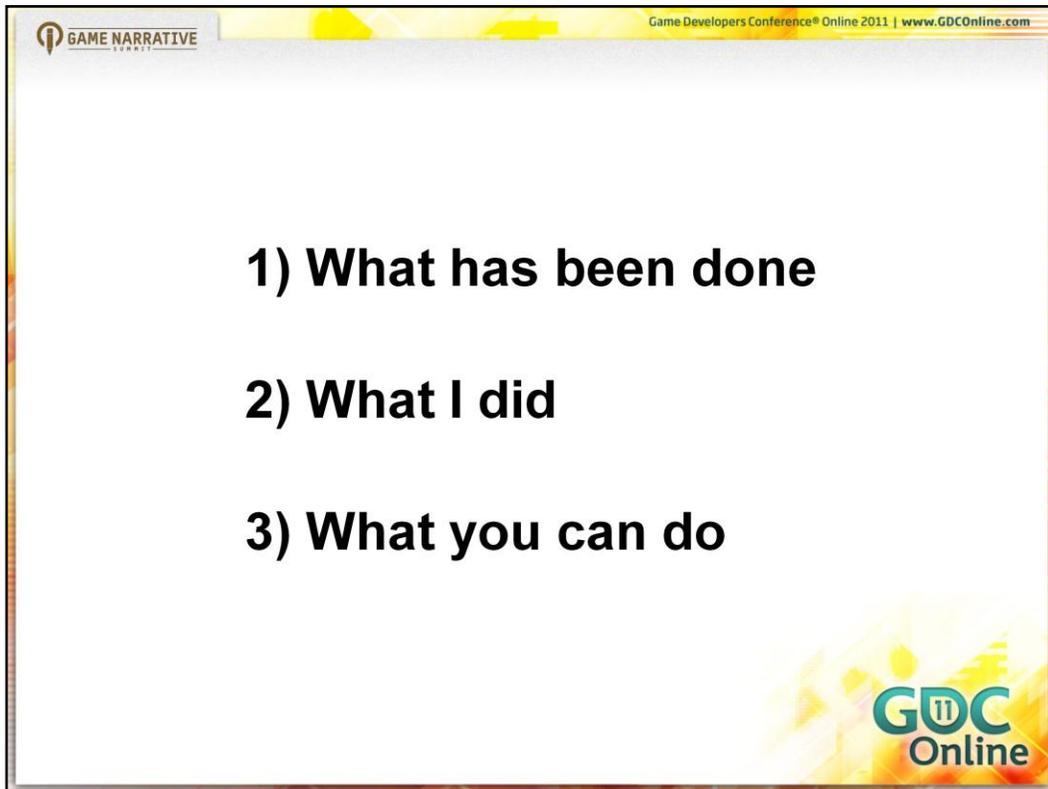
A tech problem?

How much power do you need?

It's not about how much power you have. It's about how well you use it.

**What are best practices,
independent of technology, for
creating emergent narrative
experiences for players?**

A design and development practice solution



A brief of history of narrative design as a problem

A project I did at MIT trying to deal with this problem

What I learned and what you can learn from what I did

What has been done

Abstraction



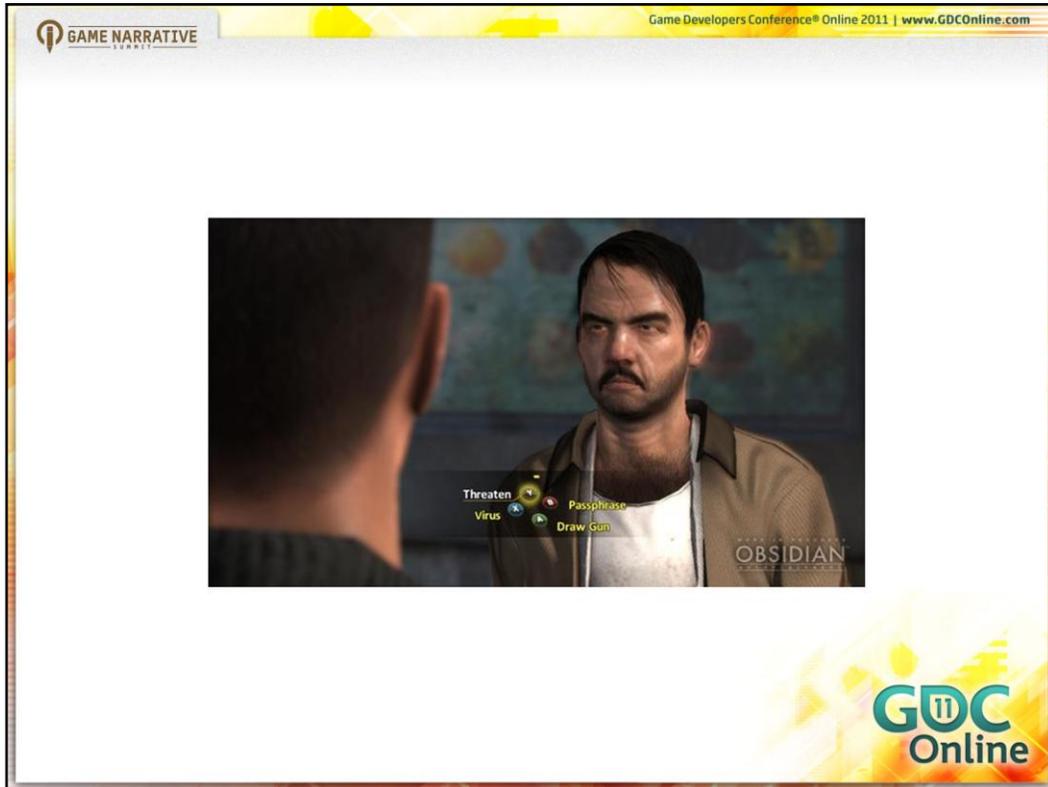
Specificity



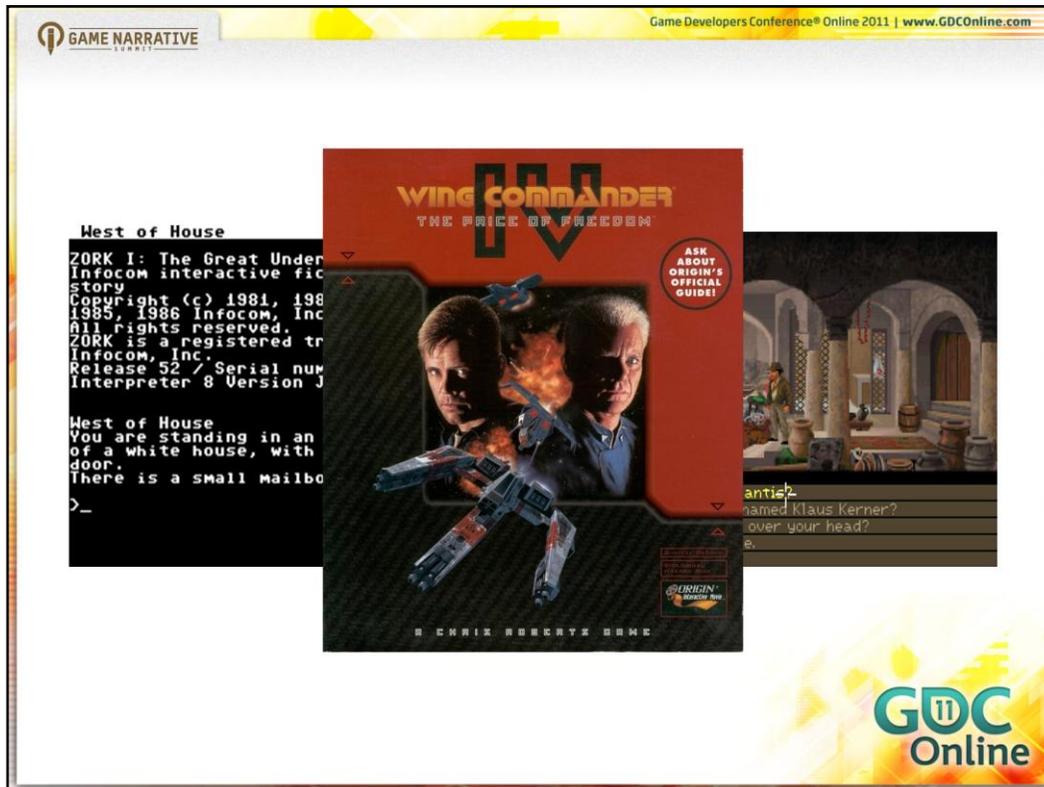
What is emergent narrative, and why is it hard? – The Sims makes complexity manageable through abstraction

Emergent narrative isn't hard. It's just hard at a certain level of SPECIFICITY.

SPECIFICITY is the hard problem.



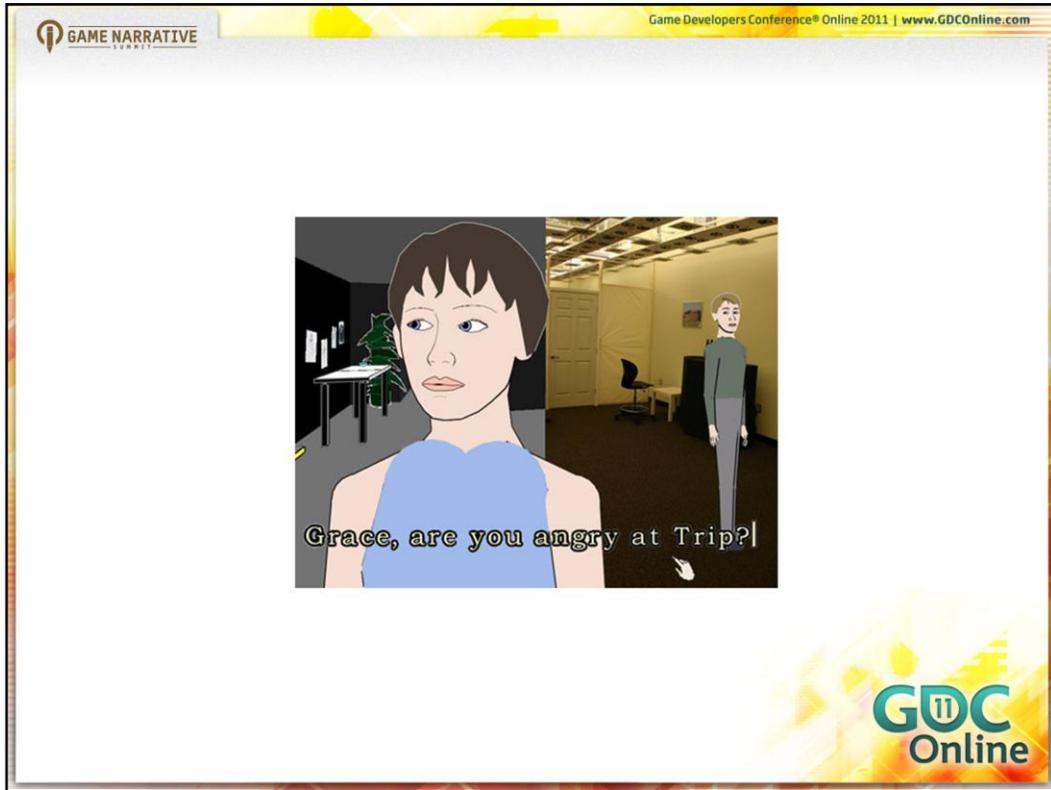
Most games handle multiple SPECIFIC outcomes by simply scripting them all. (brute force approach)



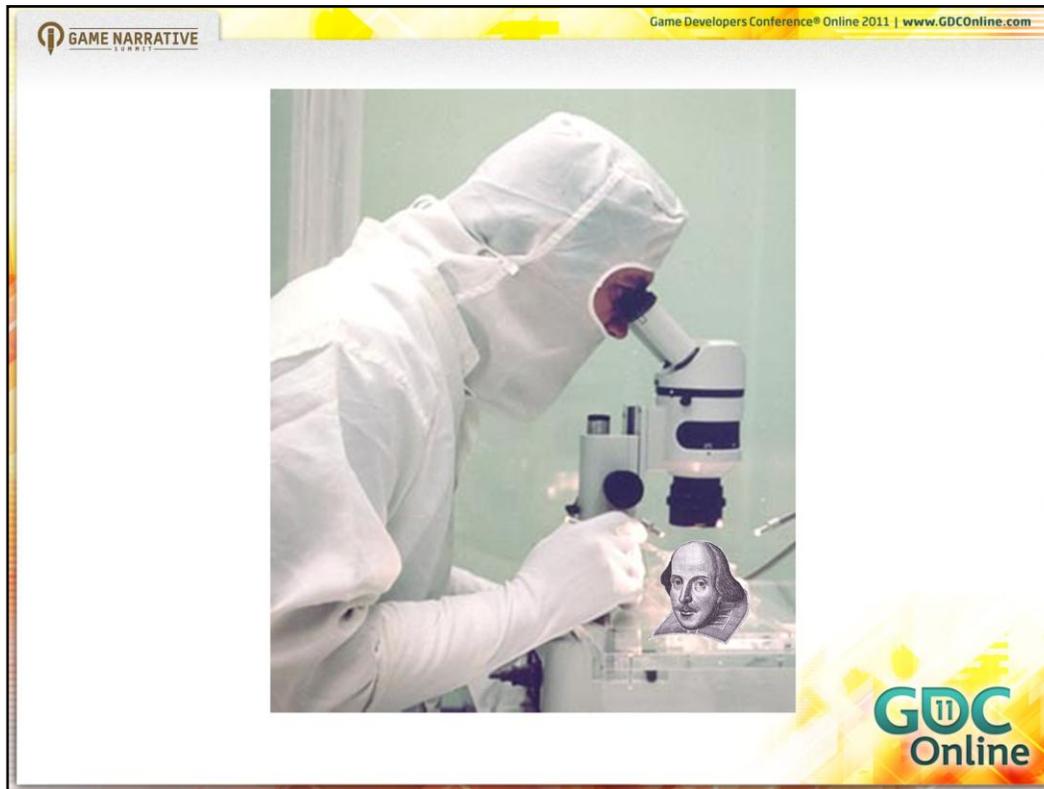
Games have done this for a long time.

It has its drawbacks (“faking” simulation, must try to read player’s mind), but it’s a clear practical approach.

Companies have become increasingly built for this approach.



This has left algorithmic outcomes largely to academia (or fringe indie developers).



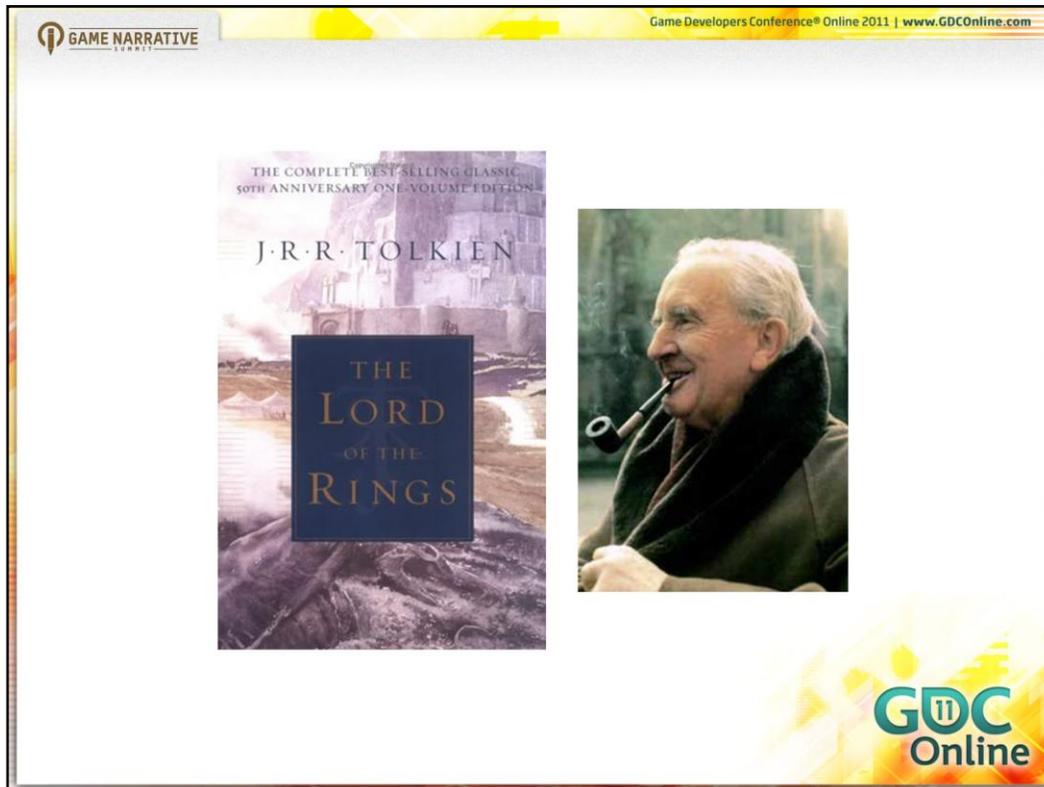
But I think there is a strong tendency to over-engineer the problem. (whole history to this that I won't go over – read expressive processing)

Divining the secrets of narrative and putting them into a computer system is missing the point.

All of this assumes narrative is an “object” to be understood, deconstructed, and reconstituted.

But “narrative” doesn't exist. Narrative is not reality but perception.

When we simulate narrative, we are simulated a perception of reality, not reality itself.



How do you know a story will be “good” then?

Tolkien, On Fairy Stories (paraphrase his argument)

The TANGIBLES are what makes stories stories, the INTANGIBLES are what makes stories good



All the games I know that produce powerful, unpredictable narrative experiences are all **WORLD SIMULATIONS** not **NARRATIVE SIMULATIONS**

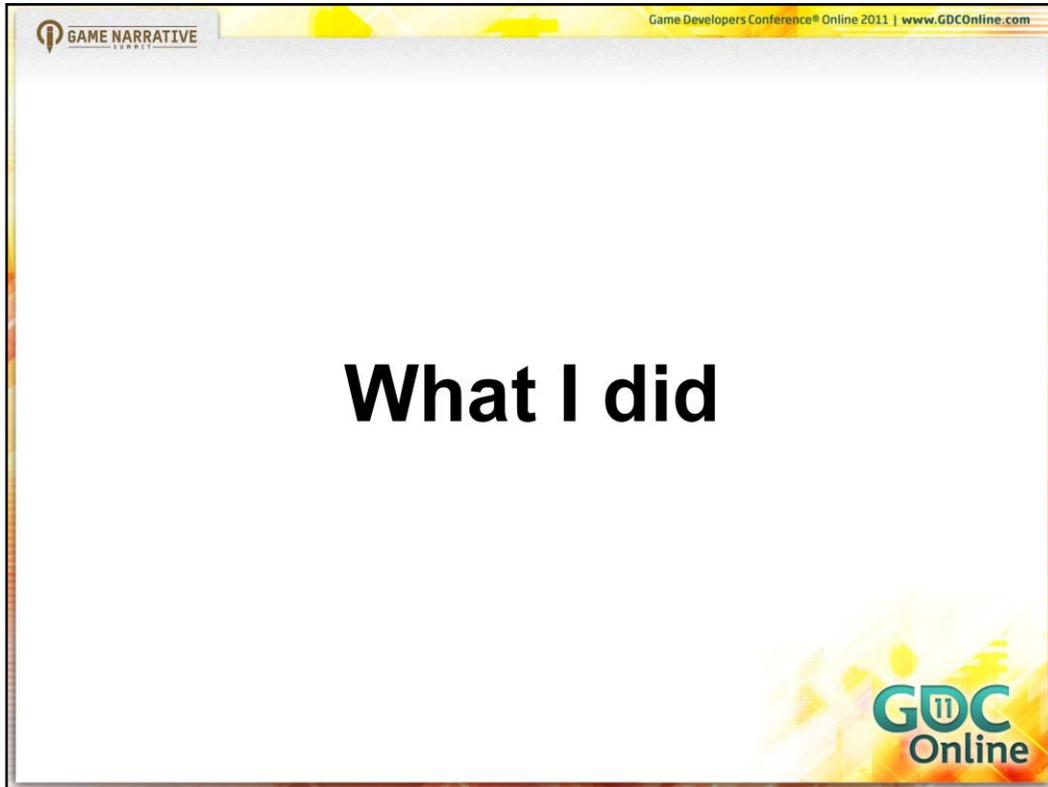
Game worlds with fabulous **RETELLABILITY**

They are just worlds in which the **RULES** and **FICTION** reinforce each other in elegant and expressive ways, inviting players to retell their play experience as a story

They deal with the complexity problem by finding the right marriage of fictional premise, art style, and game verbs (Art style makes Minecraft's mechanics possible)

They therefore ultimately value **COHERENCE** over **COMPLEXITY**, and I feel **COHERENCE** is what matters

I tend to call these sorts of games **NARRATIVE SIMULATIONS**



I wanted to reverse-engineer what these games do well and see if I could replicate this sort of narrative design



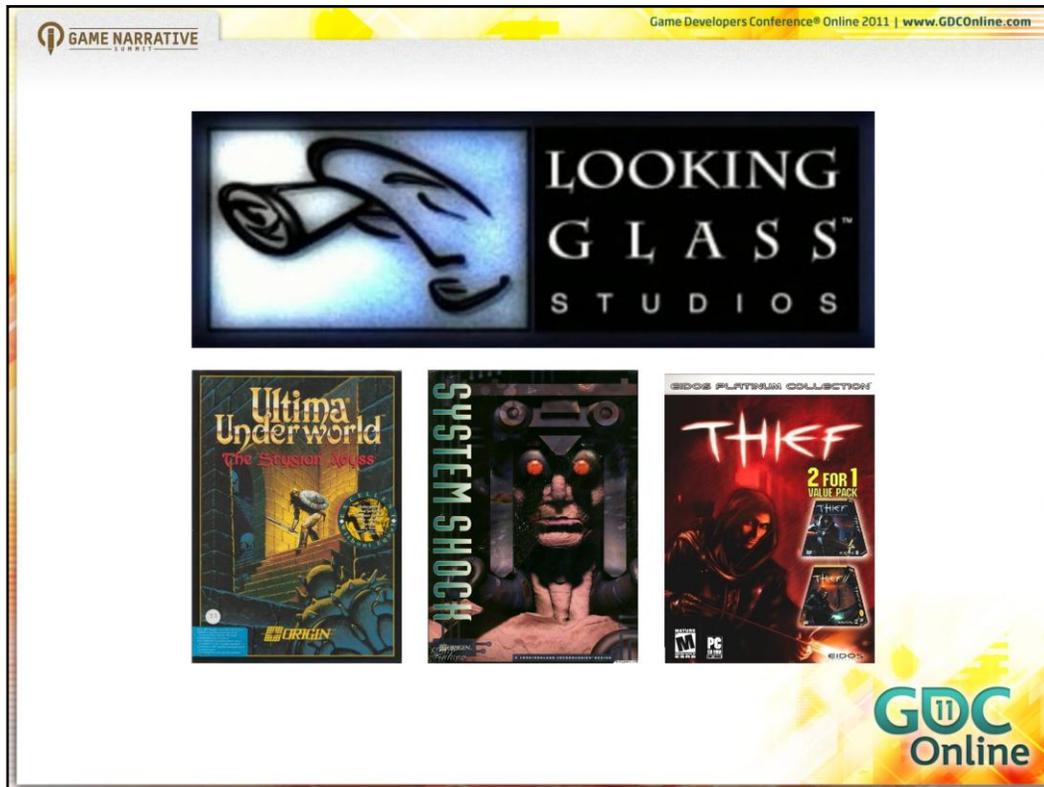
A bit about the GAMBIT summer dev. process (time frame, student interns, work hours, polish, gold cert)

Explain what the game is about, roughly (premise, goal, core gameplay)

- 1) Choose a constrained situation**
- 2) Reverse-engineer a story into verbs**
- 3) Use verbs as basis for mechanics & A.I.**
- 4) Iterate based on QA feedback**

A method for creating NARRATIVE SIMULATIONS

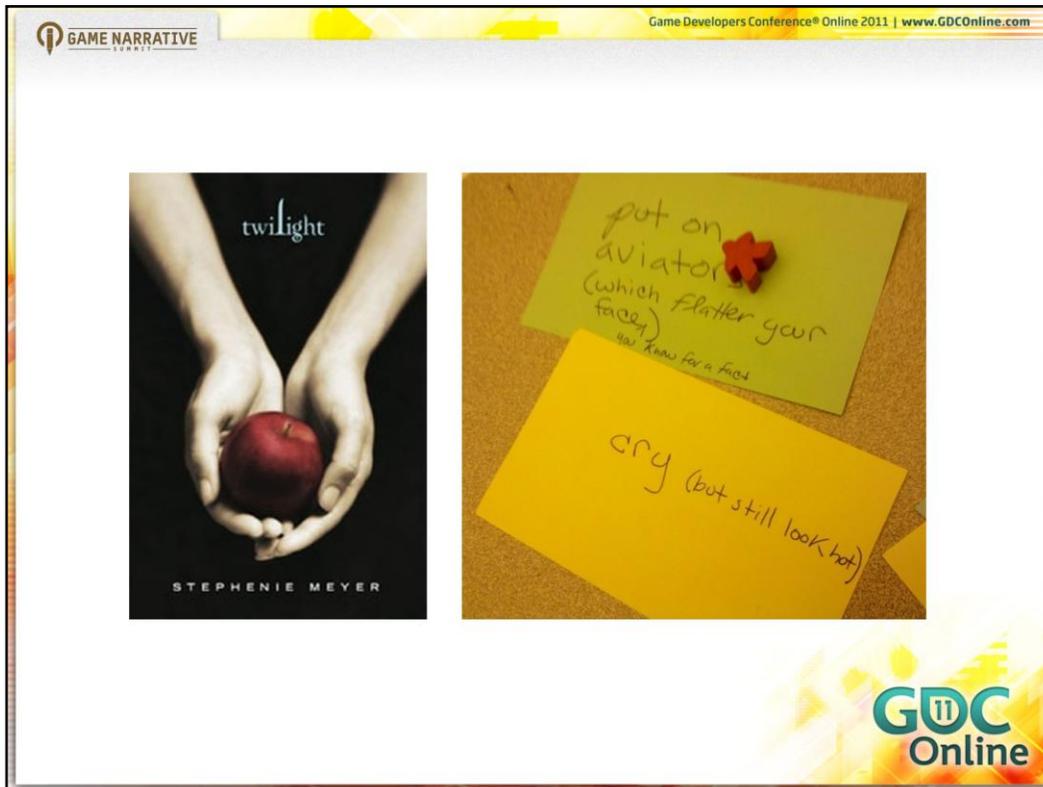
A recipe for COHERENCE



Choose a constrained situation

Looking Glass Studios (podcast)

Simulation first + used constrained fictions very creatively (UW>SS>Thief progression)

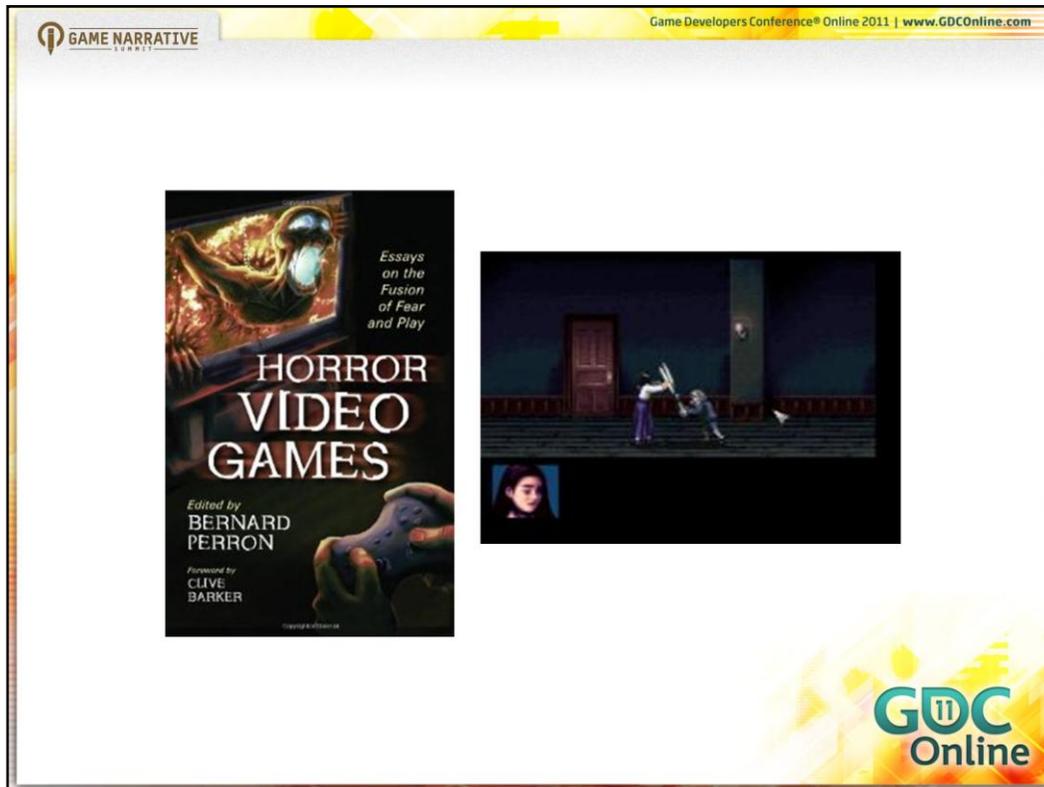


Reverse-engineering a story into verbs

Adaptation workshop – GDC Online

A game design method for reverse-engineering rule systems out of stories (taking a story and turning it into a simulation)

Brokeback Mountain, Watchmen, Twilight



Use verbs as basis for mechanics and A.I.

Got the idea from games that actually do this, though they don't get credit for it

The adaptation workshop was an attempt to replicate the design of these games



Iterate based on QA feedback

When player stories are fed back into the fiction, powerful things have resulted.

The companion cube was the result of QA, writing, and design working in tandem

THIS DOES NOT MEAN YOU SHOULD LET PLAYERS WRITE YOUR STORY!!!

GAME NARRATIVE

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Fiction-Gameplay Symbiosis



GDC Online

This is all to foster FICTION-GAMEPLAY SYMBIOSIS

(Recent) games that do this well – Ico/Shadow of the Colossus, Demon's/Dark Souls, Deadly Premonition, certain games in the Metal Gear Solid series (MGS3)

Different from emergence – you can have fiction-gameplay symbiosis with a low or high level of emergence

The challenge is to follow the guidelines for narrative-gameplay symbiosis and try to iterate towards more emergent depth within your time resource constraints

GAME NARRATIVE

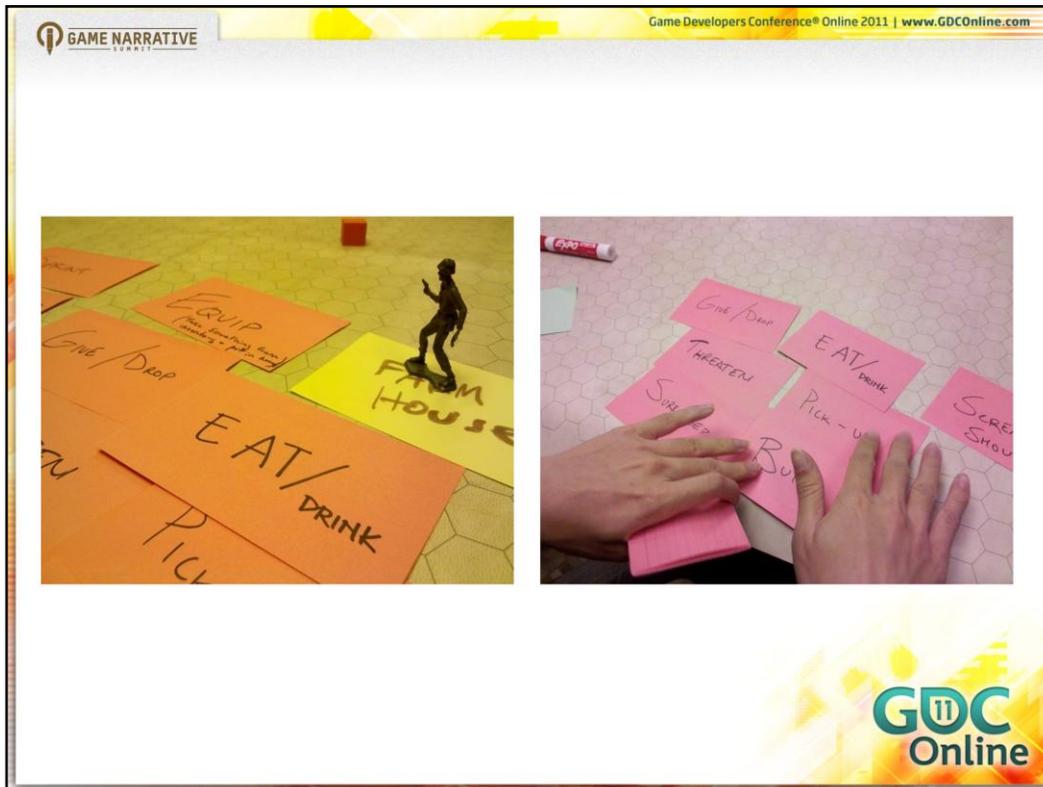
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- 1) WWI trenches in dead of winter**
- 2) Freeze, Pray, Cry, Give, Follow**
- 3) Building a fire, helping people**
- 4) A story about freezing to death**

GDC
Online

Paths of Glory and Blackadder

Find them moving, disturbing explorations of human nature

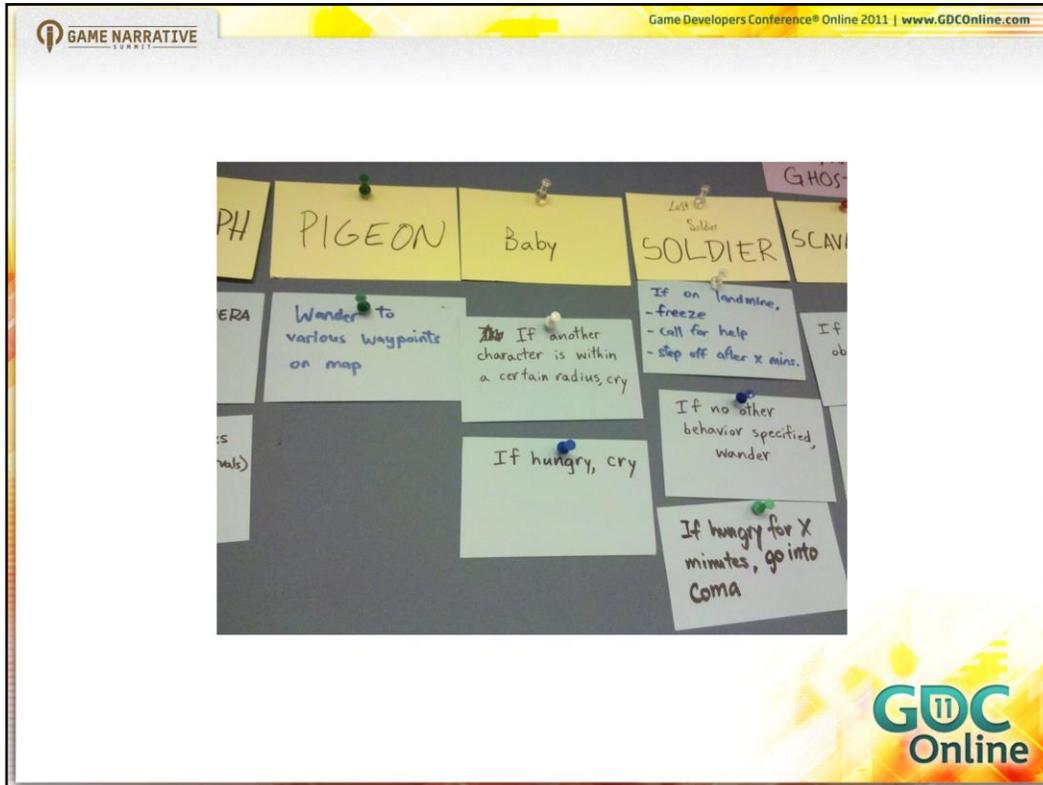


Began with paper prototyping

Tried to incorporate SOME narrative ideas (conflict, pacing, but be careful not to over-engineer it + embed them in the WORLD or A.I.)

Encouraged us to think of space as a PACING device (you don't need an A.I. storyteller)

Felt we needed characters for CONFLICT, but made the story about being lone British soldier among Germans (social constraint – maid game)



Mixed and matched behaviors we liked with different potential characters

Decided which were specific to individuals, which were specific to types, etc.

A.I. “coding” with note cards

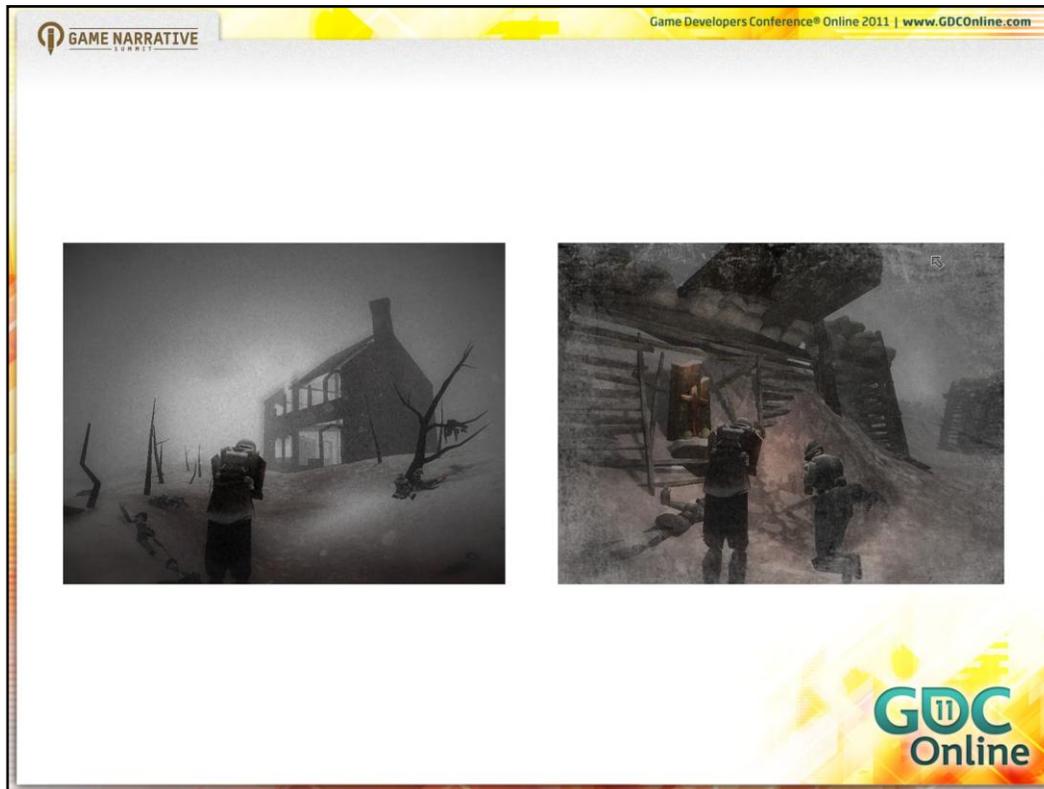


Led to some nice playtests

Story about woman who thought you were her son

“Emergent” villain – thief

This is what we tried to turn into a digital game

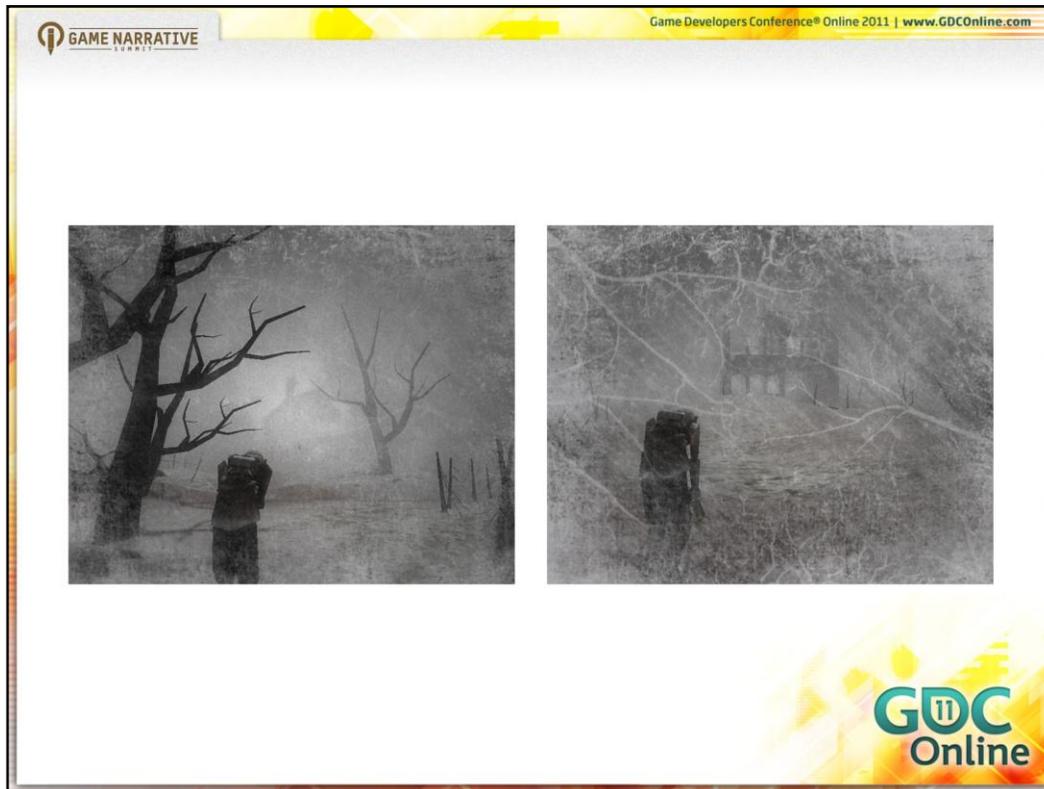


Actual digital version was extraordinarily art heavy

I wanted this, and got a team of artists, because I wanted those INTANGIBLES

Tried to deal with generation by abstracting animation (cross-fade)

It was just about what we thought what INTANGIBLES would create the effect we wanted in the time we had



This led to our “companion cube moment”

Wanted to do user stories for playtest

Way too ambitious even though we tried not to be (mention cross-fade, decision to go 3D, etc.)



We had to wrap it up.

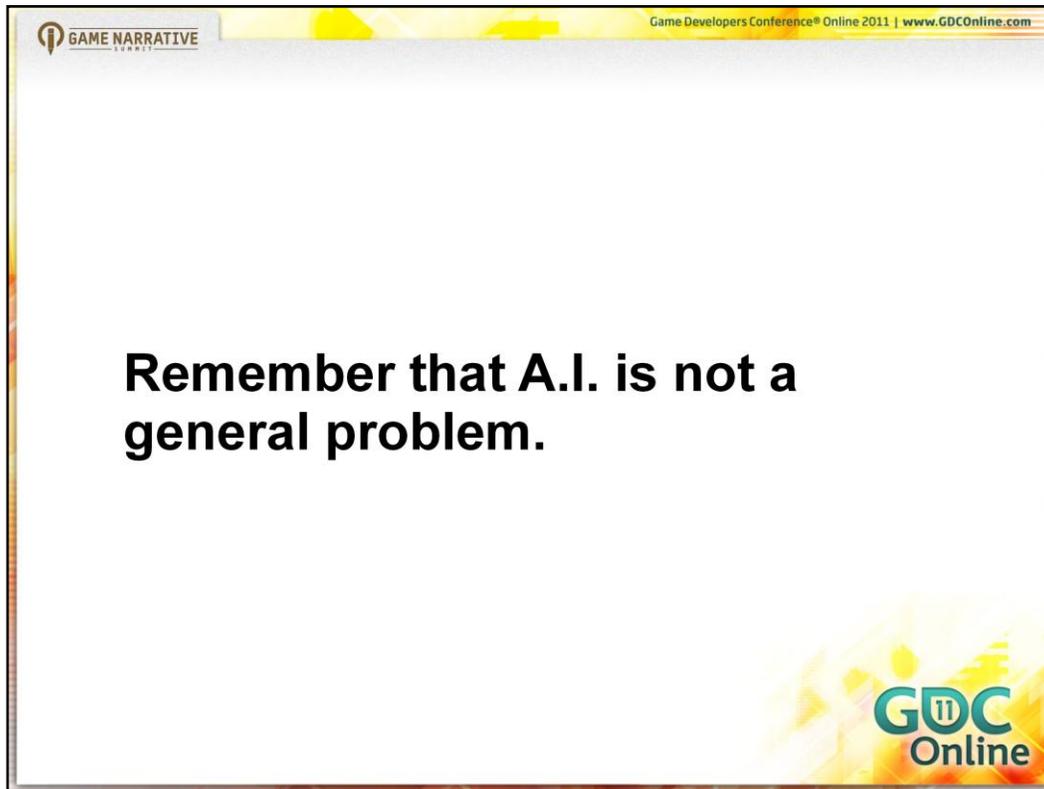
NPC movement and death timers only real simulation-based element of narrative uncertainty

High degree of narrative-gameplay symbiosis but a low level of emergence

I think we over developed our INTANGIBLES – had way more SPECIFICITY than we actually needed, probably

Continuing the project to deepen the emergence (emergent NPC histories, fighting, more abstraction)

What you can do

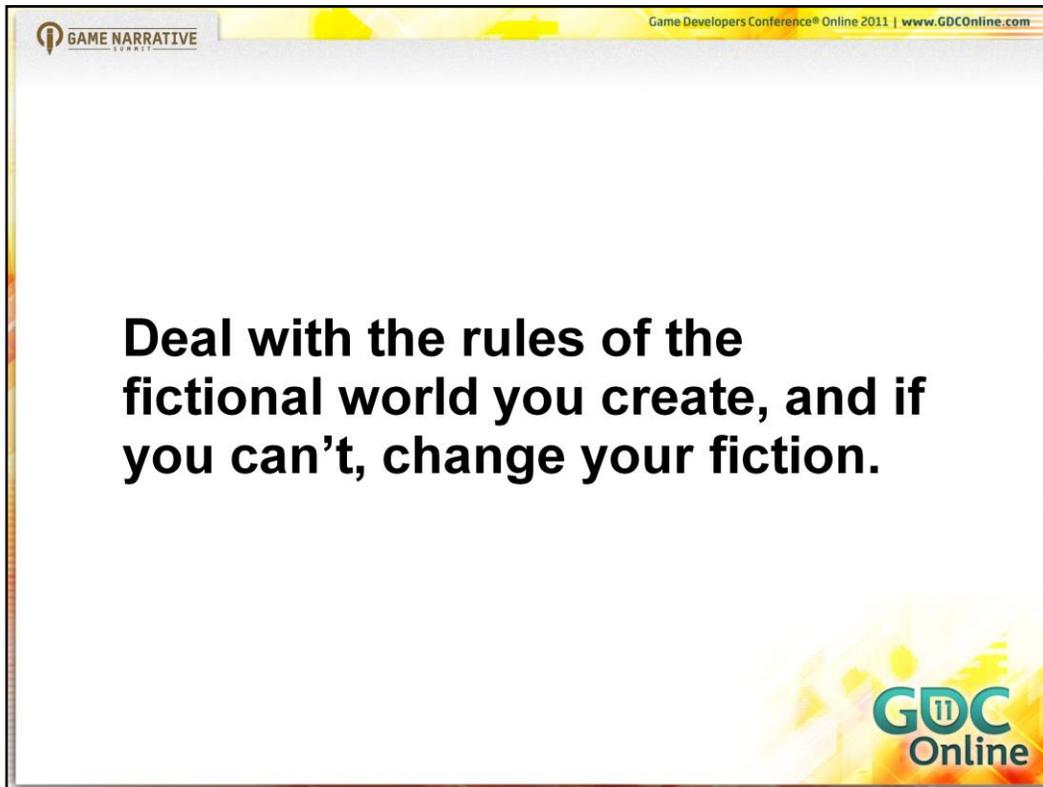


Certain aspects of A.I. might be general problems – path-finding, etc. – but not at the level of story

The real value of A.I. middleware is going to be solving these small problems so designers, programmers, and artists

**Ask what is the necessary level
of specificity you need to
achieve the effect you want?**

What level of specificity CAN you achieve?

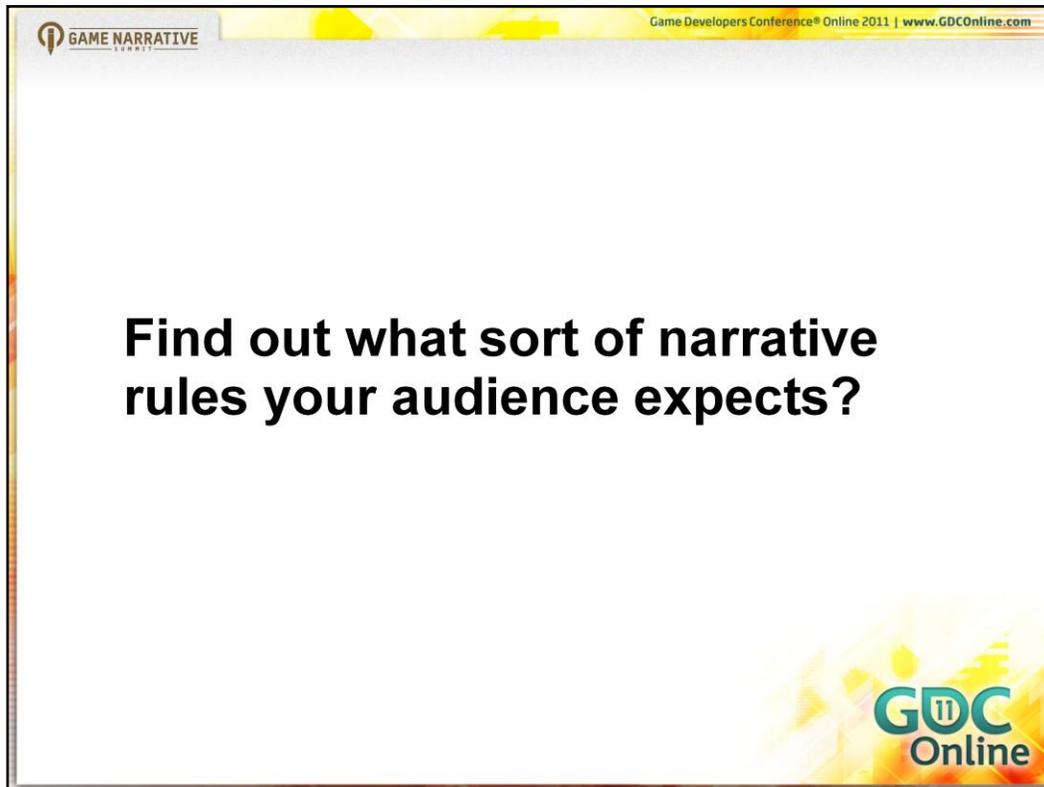


Fiction has rules too.

Avoid fiction rules that aren't also in your game system, and vice versa.

We currently cannot simulate massive worlds at high specificity without lots of dissonance

You have to be prepared to put the barrels on the outside of the ship, or else not have them.



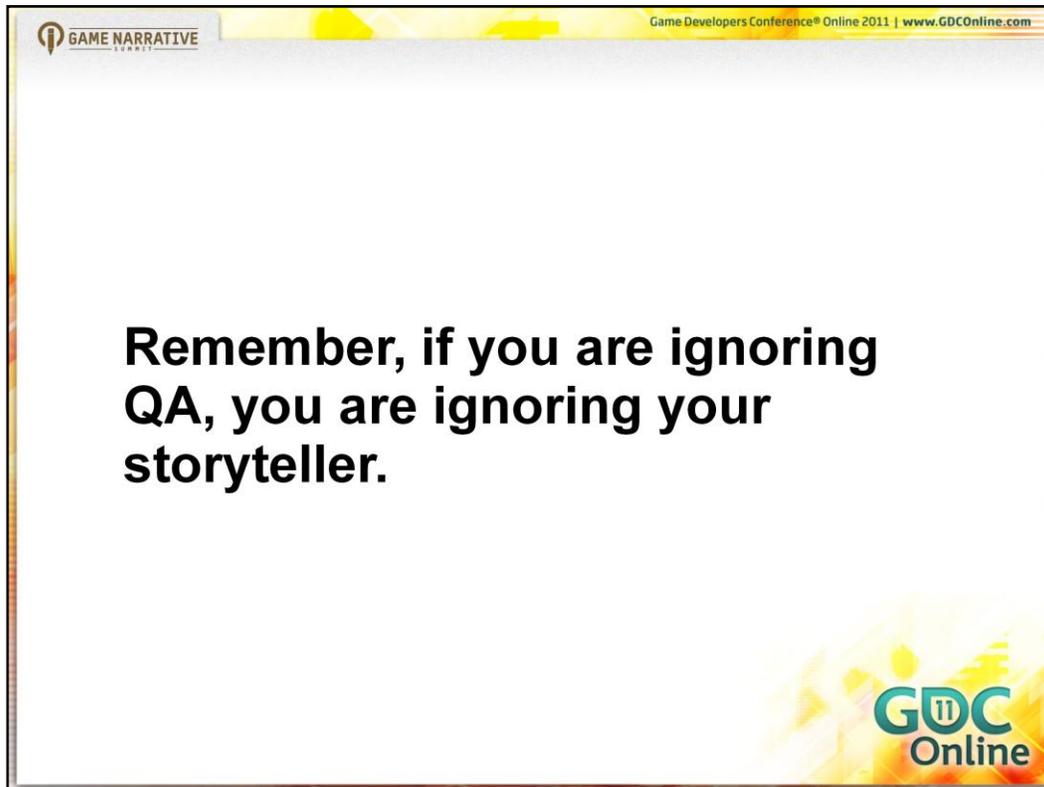
Hypothesis for the future – teaching non-gamers how to play

We have trained ourselves to deal with a lot of bullshit – by making gamers happy, we are letting down the rest of

What sort of communication and schedule affordances do you need for QA, design, art, writing, and programming to iterate in tandem?

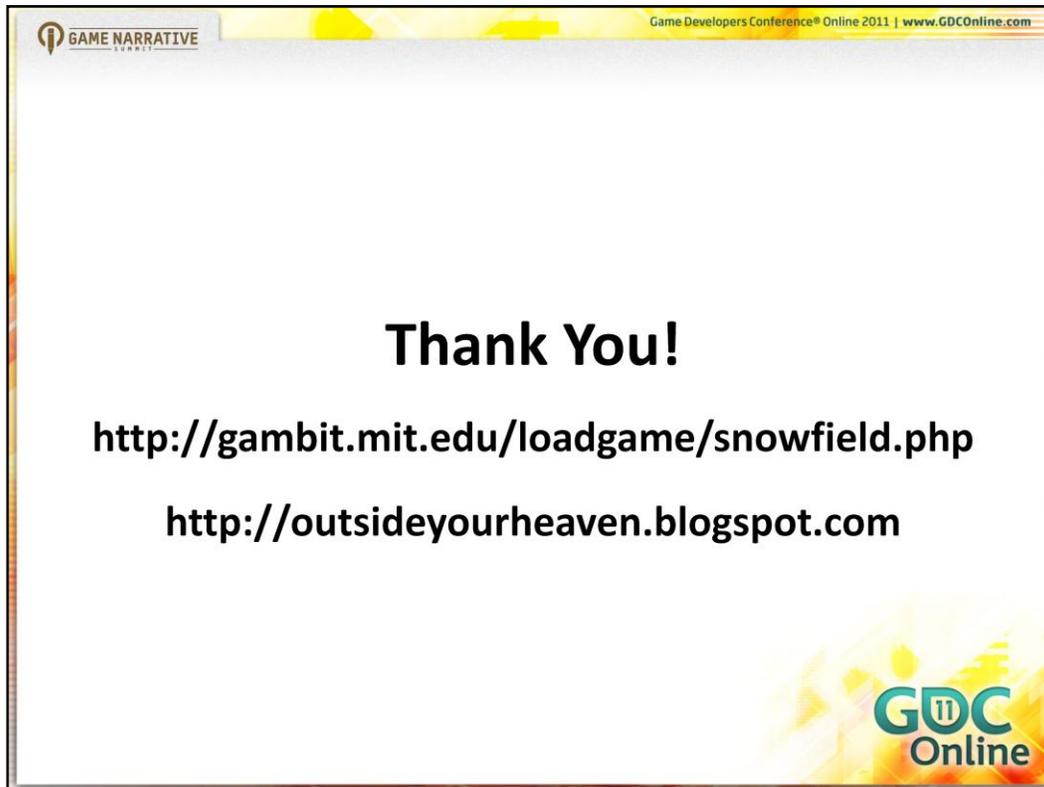
**Don't try to add a storytelling
A.I. Fix your world instead.**

Drama management is a band aid for broken world design.



The original title of this talk – the best narrative design is no narrative design

The best narrative design is world design.



This has been my attempt to divine the magic

Has been done well, but usually not articulated well (Ueda – Looking Glass did sort of articulate it though)

Technology is and always will be a tool. Tools do not solve problems. You do.

You have all the tools and you don't need to wait for science.